

WHAT IS CLAIMED IS:

1. A method of improving edge rendering of objects containing run length encoded image pixel data, comprising:

collecting an upper run-length encoded scanline and a lower run-length encoded scanline, wherein each scanline includes a string of first runs of pixels corresponding to a first object, a string of second runs corresponding to a second object and each run is specified by a minimum position in a horizontal direction, a length in pixels and a color;

wherein the first object has associated with it a first tag plane for defining rendering hints for rendering the first object;

wherein the second object has associated with it a second tag plane for defining rendering hints for rendering the second object;

inspecting each run transition, wherein a run transition comprises a point where one object run ends and another object run begins on the scanline, and identifying an interesting run located at the run transition, wherein an interesting run has at least one of a specified tag and specified contone value;

for each run transition involving an interesting run, inspecting pixels located in each of the upper and lower scanlines and right and left of the run transition and, based on the position of the inspected pixels relative to one another, determining if the tag values associated with the surrounding runs should be modified, and specifying a number of pixels to vary the corresponding tag planes; and

if the tag plane of one of the objects corresponding to the intersecting runs is to be dilated in the horizontal direction, a new run is inserted at the run transition having the specified number of pixels in length and the tag value of the object to be dilated; and the tag plane of the other object is decreased by removing the specified number of pixels in length from the run adjacent to the interesting run.

2. The method of claim 1, wherein the new run is at least one pixel in length.

3. The method of claim 1, wherein the new run is two pixels in length.

4. The method of claim 1, wherein the new run is three pixels in length.

5. The method of claim 1, wherein if a tag plane needs to be modified in the vertical direction;

if the tag plane of the object associated with the interesting run is to be dilated and the tag plane of the object associated with the other run is to be contracted in the vertical or slow scan direction, the other run is subdivided into two separate runs, and the subdivided portion adjacent to the interesting run is assigned the tag value of the interesting run; and

repeating this for a number of times equal to the specified number of pixels for the runs adjacent to the other run in the vertical direction.

6. The method of claim 5 where the number of scanlines modified is equal to at least one.

7. The method of claim 5 where the number of scanlines modified is equal to two.

8. The method of claim 5 where the number of scanlines modified is equal to three.

9. The method of claim 1, wherein the first object comprises a white object and wherein the second object comprises a non-white object.

10. The method of claim 9, wherein the white object is at least one of a text object and a stroke object and the non-white object is at least one of a fill object, an image object and a sweep object.

11. The method of claim 5, wherein the first object comprises a white object and wherein the second object comprises a non-white object.

12. The method of claim 11, wherein the white object is at least one of a text object and a stroke object and the non-white object is at least one of a fill object, an image object and a sweep object.